Before the

Federal Communications Commission
Washington, D.C. 20554

FCC 96-93

In the Matter of	)	
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Federal-State Joint Board on Universal Service	)	CC Docket No. 96-45
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	)	

Comments of

Benton Foundation

Kevin Taglang
Benton Foundation
1634 Eye St., NW
Washington, DC 20006
202.638.5770
benton@benton.org

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I Background

The Benton Foundation's Communications Policy Project is a nonpartisan initiative to strengthen public interest efforts in shaping the emerging National Information Infrastructure (NII). It is Benton's conviction that the vigorous participation of the nonprofit sector in policy debates and demonstration projects will help realize the public interest potential of the NII. Over the past two years the Benton Foundation has commissioned a number of research papers on the subject of universal service and now hosts the World Wide Web's most comprehensive library of universal service and access documents[1].

II Introduction

In responding to the Commission's Notice of Proposed Rulemaking (NPRM) on universal service (Common Carrier Docket No. 96-45), the Benton Foundation focuses its remarks on the lessons learned from a number of public interest organizations. Benton believes that community-based and public interest organizations can inform public policy if we highlight their successful use of information and communications technologies to connect citizens to each other and to the institutions and the information they need to fully participate in society. These lessons point to the need for additional principles to be included in the consideration of the preservation and the advancement of universal service.

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[1] see URL http://www.benton.org/Uniserv/

III Additional Principles When Considering Services to be Included in Universal Service Provisions

In considering universal service options for the emerging communications system, the Board and the Commission should adopt policies that guarantee these public interest benefits are delivered along with the entertainment and commercial options; view the people who receive these benefits as contributors to the wealth of the nation not just as consumers of services; and encourage continuous access and participation. Benton, therefore, offers additional principles relevant to the choice of services that should receive universal service support[2].

- Externality Costs. The policy should recognize the cost of not getting all citizens connected. The value of a network – any network, phone or computer – diminishes as fewer and fewer people have access to it. This decreased value should be weighed against arguments that universal service is too costly. Senator Larry Pressler, a prime sponsor of the Telecommunications Act, has advocated "subordinating the drive for deregulation and, where necessary, even competition, to the extent that it jeopardizes the realization of universal telecommunications service[3]."
- Usage. For too many of those who fall off networks, subscribership is an on-again, off-again relationship. Following the Commission's request for comment on toll limitation services[4], Benton believes these services to be essential to universal service policy. To maintain a continuous connection to the network, users need to be able to control their

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[2] 1996 Telecommunications Act sec. 101 (a), § 254(b) (7) and NPRM at 8.

[3] Pressler, Larry and Kevin V. Schieffer. A Proposal for Universal Telecommunications Service. 40 Federal Communication Law Journal 351, 3544 n. 7 (1988)

[4] NPRM at 54.

costs. The majority of households without telephone service once had it, but were forced off the network due to inability to pay toll charges[5]. The new universal service policy should allow users to block and/or prepay toll charges that could otherwise cause disconnection. The policy should also discourage or prohibit local telecommunications providers from disconnecting subscribers for failure to pay for long distance charges.

- Personal Choice. Traditionally, guaranteeing universal service entailed ensuring that a single set of facilities, delivering a single service (voice grade telephony) and requiring a single type of customer premises equipment, reached every home. The competitive environment established by the Telecommunications Act is likely to result in multiple facilities, delivering multiple services, and likely to require various CPE. In order to ensure that the fundamental goal of the Act is met, viz., to make available, "to *all* people of the United States... a rapid, efficient ... wire and radio communication service with adequate facilities..." (emphasis added), the Commission should recognize that no one service or set of services is capable of meeting that requirement. If all Americans are to enjoy a communication service with adequate facilities, the Commission should allow users to identify the set of services that enables the user to be so served. For some users – the deaf, for example – voice telephony is inadequate to the goal. Consistent with the Act's requirements that funding mechanisms be predictable, the Commission could set an allowance or some other mechanism under which a user could choose from a basket of services in order to be served appropriately. Such an arrangement would meet the Act's need for predictability, since costs would be within the allowance, while allowing users to specify how best to meet their needs.
- Equipment. Just as our nation's roads would be left unused if drivers could not afford cars, the NII will be under-used if citizens cannot afford the tools needed to navigate them.

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[5] Federal Communications Bureau, Preparation for Addressing Universal Service Issues: A Review of Interstate Support Mechanisms. February 1996.

Along with quality *services* available at just, reasonable, and affordable rates[6], citizens will need affordable, quality *machines* such as phones, modems and computers. This is not to suggest a national, computer voucher system. However, a national, coordinated effort to recycle and refurbish older equipment could deliver basic machines in households and communities where there are no computers at all.

- Consumer Education. Users will need expertise to navigate the networks and choices available in the increasingly competitive telecommunications industry. As a form of consumer protection. the public will need ongoing consumer education so that individuals and organizations are aware of the options available to them, are able to make informed decisions about these options, understand the pricing of the services, and know how to get assistance if they have difficulties with service reliability, bills, privacy, and/or other problems. Like equipment, education is not a once-in-a-lifetime investment and will have to be available on an ongoing basis so that consumers can keep abreast of an ever changing communications environment. A model is the Wisconsin Advanced Telecommunications Foundation[7] which has as its purpose "the establishment and administration of an endowment fund to support advanced telecommunications technology application projects and efforts to educate telecommunications users about advanced telecommunications services."

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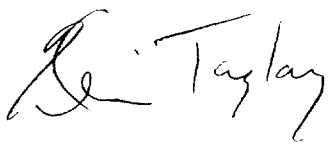
[6] 1996 Telecommunications Act sec. 101(a), § 254(b) (1)

[7] The Foundation is organized as a nonprofit, nonstock public entity with the participation of the state and at least five telecommunications providers who operate in the state.

IV Conclusion

In the exhibits below, Benton highlights innovative applications of communications and information technologies by nonprofit organizations. An easy to use computer bulletin board system connects disabled individuals and their families scattered across an entire state. A low-cost electronic bulletin board enables a working-class neighborhood to organize a food co-op, publish a newsletter and establish crime watches. An organization uses a simple computerized database and conference calling to help clients find the services they need from among 3,500 agencies. These innovators are models for delivering the promise of the NII to the citizens and the communities most at risk of falling off national networks. Their approaches to the problems of information distribution present the best hope of improving the nation's information services while reducing the costs associated with maintaining them. Community-based organizations and public interest advocates are moving to take advantage of communications and information technologies, and turning these new tools to the advantage of the constituencies they serve. Exhibits A - F describe the services these organizations offer, the challenges they face, and how a flexible universal service policy could promote continued development of public interest applications in our nation's emerging information infrastructure.

Respectfully submitted,



Kevin Taglang
Communications Policy Project
Benton Foundation

EXHIBIT A

A User-Driven, Low-Tech, State-wide Network for People with Disabilities

The Maine Meeting Place (MMP) is a statewide bulletin board service (BBS) computer network created in February 1992 for people with disabilities, their families, and those who serve them. The network was founded by a parent with two young disabled children. The parent experienced difficulty networking with other people with disabilities and their families and obtaining timely information about disability issues. Due to Maine's rural character, families with disabled children rarely communicated with other families, and their primary contacts with people knowledgeable about disabilities were with state agencies or other service providers. Using MMP, people can obtain and share information, meet others with similar problems and concerns, and contribute to disability awareness. The network is accessible over regular telephone which could be accessed by users throughout Maine (or elsewhere) lines via a "1-800" telephone number using low-cost terminal equipment and personal computers.

Early in the project, MMP staff identified a large number of low-cost "Sceptre" terminal devices which were eventually purchased and distributed at no cost to users by the Maine Developmental Disabilities Council. These devices were purchased at a cost of about $25 per unit. They were essentially a small keyboard with a modem and a connection to a household television set. A user would plug the device into a phone line and a TV in order to connect to the network. The television screen served as the monitor. Using this very basic technology, even families without a home computer could participate in the network from their homes. Although the Sceptre terminals are no longer available, MMP is continuing to seek and receive donations of otherwise obsolete computer equipment that founder Lou McIntosh says are "so out of date in today's business world that they aren't worth the money to cart them away." Recently, MMP received a donation of old "286" computers which will be disseminated to users after being fitted with modems.

MMP users can access the system with otherwise outdated computers because of its commitment to text-based rather than graphical interfaces. Despite the fairly common view that the World Wide Web, multimedia, and graphical interfaces are taking over, the text- based format will remain the best vehicle for broad-based citizen access. Because a computer that can interpret electronic text (and programs that can read text characters aloud) can be very inexpensive, it potentially provides the easiest way for most US households to participate electronically.

Maine Meeting Place is designed to be particularly easy for first-time users to understand. The Sceptre terminals are so simple to use that most users are able to connect to the network with no more than a photocopied instruction sheet. As a result of MMP's commitment to ensuring genuine low-cost general access, the network has particular success in developing user participation in Maine's most rural and isolated areas, as well as a peer-support network which involves users from every income level and from every kind of educational background.

MMP users include about 900 families or individual members statewide, and staff of state agencies and private service providers that serve this population. Staff of MMP is working on expanding MMP's services to include online "question and answer" areas with state disability advocates and state agency representatives, since the answers to questions that one family may have will likely benefit others.

MMP is accessible by a toll-free number. The cost to MMP for the connection is high, but the benefits are many. One result of MMP's extraordinary accessibility is that families can locate important information and develop critical personalized support systems despite geographic distance. Additionally, MMP's Director Ann Holcomb feels the existence and use of the network has created conditions that allow families to better advocate for themselves, using information they have learned from peers about standards and practices in another part of the state. This pressure

has in turn pushed agencies and service providers to coordinate more effectively with each other, and has led to more consistent services statewide and greater accountability to users.

Impact of MMP

Examples of the impact of the system on users and on the community are cited in MMP's June 1993 first year final report. (Abbreviated excerpts follow):

Impact on the Individual

Example 1: An adult with a substantial disability, living independently with assistance in an urban environment, began using the network to communicate with her sister who lived an hour away. The sister reported in a private communication to Project staff that their relationship had been substantially altered by their interaction through the network: she reported "getting to know my sister for the first time," because the network interaction was the first communication they had ever enjoyed in which her sister's disability was not the foremost issue and obstacle. The sister with a disability used the network not only to correspond with her family but to exchange messages with other people with disabilities throughout the Northeastern United States.

Example 2: A parent in Central Maine reported to Project staff that her elementary- school-aged son with a disability had been able to enjoy the company of several other children with disabilities at his birthday party as a result of contacts through the network. The parent reported that this was the first time her son had been able to invite his own personal friends (whom he had "met" through the network) in addition to his peers from his school class, and that the occasion had represented much lower stress for her as a result.

Impact at the State Level

Example 1: The State Bureau of Medical Services issued a memorandum to service providers, instructing them that they must procure an Explanation of Benefits Form (EOB) from private insurers, documenting a refusal to pay for a particular service, before paying any Medicaid claim. Several parents used the Maine Meeting Place network to raise the question of how this memorandum affected their children's right to Free and Appropriate Public Education under the Individuals with Disabilities Education Act, which provides that educational services—including those reimbursable under Medicaid—shall be provided "at no cost to the parent." Through the network, this question was raised directly with the Third Party Payment Consultant to Maine's Department of Education, who was able to resolve the issue without further inconvenience to the users.

Example 2: The network provided an obvious route for rapid distribution of time-critical information to professionals. At the time the Federal Regulations implementing the IDEA. Part B were issued in the fall of 1992, the State Committee on Transition was in the process of finalizing its own policies to implement transition planning. Through the Maine Meeting Place, the Part B

Regulations were made available for professionals across the state within two days of their publication in Washington, and three to six weeks earlier than they would ordinarily have been available as input to the planning process. Likewise, Maine's revised Special Education Regulations were made available in electronic form on the network, resulting in reduced distribution and acquisition costs for professionals as well as enhanced availability for users.

Problems

A) Costs and Funding Issues

Operational funding for MMP is provided by a variety of sources, including state and federal government. Director Ann Holcomb says that "it is still an annual scramble" to secure ongoing funding for MMP and its toll-free access number. Foundations and other institutional donors are more likely to contribute to hardware and setup costs than to ongoing operational budgets. Expenses for telecommunications services are 25% of the project's annual budget.

B) Access Issues

MMP organizers point out that access in public libraries and other public areas is not adequate for many of the network's users, due in part to Maine's rural character, but in larger part to the needs of the user population. Many users say that the only time they can find to access the BBS is late at night when their children are asleep or their responsibilities for the day are over.

Solutions

A) Partnership with State Agencies

As agencies and service providers have increasingly used the network, agency staff have realized its use as an important tool to coordinate among themselves as well. Several agencies now contract with MMP to use it as the agency email site and to share information or work on documents together in private agency conference areas. As noted above, the agencies also make information available free to MMP users. These information increases the value of the network, attracts users, enables users to become their own advocate and helps to coordinate services throughout the state.

The partnership between MMP and the Maine Development Disabilities Council helped deliver the equipment needed to access the network at no charge to users.

B) Commercial Areas on Public Spaces

As one way to offset funding problems, MMP is considering expanding to include a commercial area where individuals and service providers can post advertisements for products and services.

C) Universal Service Provisions

The new, national universal service policy could promote the Maine Meeting Place model in two ways:

- It can provide preferential rates for services targeted at-risk communities. Discounts would decrease operating expenses for innovative networks like this and guarantee access for low-income individuals and families.
- It can encourage contributions of otherwise obsolete computers and modems to ensure accessibility for low-income users.
- It can encourage government agencies to provide information in a format and cost that makes access easy for network users.

MMP founder Lou McIntosh feels that MMP has been a success because of its universal low-cost accessibility, and that telecommunications planning should define access for citizens broadly. Given a flexible public policy, this model could be replicated to serve many vulnerable communities and to connect them to each other, to the nation and to the world. The services this system offers appears to be consistent with public interest and is a great convenience if not necessity to the community it serves.

EXHIBIT B

Linking Up Villages: Small-scale computer networking

Advances in telecommunications may be turning the world into a global village, but they also can bring individual neighborhoods together.

Linking Up Villages (LUV) is a Boston-based project designed to reinvigorate communities through local electronic bulletin boards and software called Multi-User Sessions in Community (MUSIC). "The LUV motto is, rather than focusing on National Information Infrastructure, to us, NII is really about Neighborhood Information Infrastructure," says Alan Shaw, president of MUSIC, Inc., the for-profit counterpart to LUV.

Shaw designed the MUSIC software a few years ago at the Massachusetts Institute of Technology's Media Lab. It enables participants to create an on-line version of their communities, complete with "buildings" and, within the buildings, "rooms." Subject to rules adopted by individual communities, individuals can "stroll" through this graphical "virtual neighborhood," obtain information on community services and activities, make their own contributions to the database, participate in live "chat" groups or engage in sustained discussions through various community forums. All that is needed is a computer and a modem.

In Dorchester, a working-class Boston neighborhood, neighbors who got together online formed a food co-op, a neighborhood watch, and a community newsletter. In Newark, N.J., where a grant from the National Telecommunications Infrastructure Administration helped LUV install a more extensive system, neighbors have put together a database on adult education programs, an employment hotline, a "political action" room, and discussion groups on everything from AIDS to recipes. Some local doctors have come on-line to answer health questions.

LUV gives away its software to needy communities, and provides technical and start-up consultations for about $2,500. The big cost for a community wanting to develop a system is the computers. An $8,000 grant from the Wood Foundation helped put computers into a dozen neighborhoods in Boston. The NTIA provided $106,000 to help the Newark community purchase around 35 computers and pay other start-up costs. LUV encourages communities to put computers in libraries and other public access locations and to ask businesses to donate their used computers. It also is preparing an IBM-compatible version (the software currently works only on Macintosh computers), and is even exploring the possibility of developing the software to run on Nintendo or Sega players, which can be found in many households that don't have personal computers.

LUV hopes to become self-sustaining, partly by relying on funds raised through the for-profit MUSIC Inc., which plans to sell Shaw's software to corporations and communities that can afford to pay the cost.

EXHIBIT C

People's House: Connecting clients to service providers

The American social service system has always relied in large part on local initiative. But lack of central authority can create problems: In a decentralized system, how do you connect clients to the right service providers?

People's House, which has been operating in Washington, D.C., for four years, combines two common and easily accessible technologies, three-way phone calling and a computer database to make getting help as easy as finding a phone booth. Once People's House gets a call from someone in need, a staff member types key words into a computer (donated Macintoshes) to find which of 3,500 organizations in its database can best help. People's House then sets up a three-way call to bring client and service provider together. By participating in the call, People's House makes certain the client's needs can be met; the search continues until a successful match has been made.

This system saves clients the trouble of bouncing from group to group. And it frees caseworkers from the time-consuming task of screening clients and making referrals for those they can't help. At a time of tight social service budgets, this enhances the overall efficiency of the social services system.

The two technologies utilized by People's House have been around for many years, so setting up a similar service in other locations would be straightforward. Brian Kumnick, the executive director of People's House, would like to introduce the system to charities where people often go for all kinds of help. "We're trying to give them the capacity to do things faster and easier by giving them access to technology," he says.

One of the biggest hurdles to replicating the People's House concept to other cities is the labor required to build and maintain the database and to handle telephone calls; People's House relies mainly on volunteers, but other agencies might be able to pool their resources so that no single entity has to bear the full cost. And the reduced workload on caseworkers might even justify charging providers a small fee for the service.

Another challenge is to get the word out to prospective clients that the service is available. Fred Taylor, executive director of For Love of Children, an agency that has received referrals from People's House, hopes to help on that front by giving the project a home in a community center, where people could be introduced to it.

"Right now, it lacks visibility," he says. "If we can set it up where people can see it, it will gain credibility."

EXHIBIT D

Emergency Hunger LifeLine: Extending the reach of local nonprofits

There's a new way for small, nonprofit organizations to raise their profile and reach people in need.

A project called the Emergency Hunger LifeLINE is establishing a single, nationwide telephone number that anybody can call to obtain food. Under the system, which already is operating in Washington, D.C. and West Virginia, any call to the number 1-800-HUNGRY2 will be automatically routed to the local referral agency nearest to the caller, based on the caller's area code and exchange. The referral group in Washington – it's People's House – can immediately connect the caller to the nearest source of food.

The Hunger Lifeline project is managed by the Rapid Action Food Team of Alexandria, Virginia. With the support of the nation's largest hunger relief organizations and technical and financial support from MCI Telecommunications Corp., the team is about to launch pilots in 11 locations prior to going nationwide next year.

Although the concept is simple, several hurdles had to be overcome before sponsors could move to launch the system nationwide. Hundreds of local hunger-relief programs across the nation had to be coordinated. On the technical side, a system had to be developed to route "800" calls to agencies in the same exchanges where they originate.

The system should prove to be worth the effort, though. Because the single telephone number can be publicized nationally, the cost of advertising for each local group will be less than if it had to publicize a separate number for each locality. At the same time, the chances of reaching prospective clients will be increased. And the system will be quite flexible; it even will be set up so that people who want to volunteer their assistance will also be able to call.

"It's one number, it's easy to remember, you can call it if you're hungry, want to volunteer, want to pledge support, (or) want more information," says John Mennell, manager of the project.

EXHIBIT E

ImmuneWatch: Reaching the hard-to-serve client

Sometimes the biggest challenge service organizations face is finding and keeping track of the people most in need of help.

To keep low-income children from slipping through the cracks of the health care system, ImmuneWatch, Inc., a for-profit company based in Washington, D.C., has developed a central databank of immunization records. ImmuneWatch regularly checks the city's registry of births, and then maintains records on each child's vaccination history. The system also is set up to alert parents when scheduled immunizations are due.

Many of ImmuneWatch's target clientele don't have complete, up-to-date health records because they move frequently or lack regular relationships with physicians and other health-care providers. ImmuneWatch seeks to fill the void. Large health-care providers have access to its records – and can add new information to them – free of charge via computer. Smaller providers who don't have computers can use the telephone; the automated AT&T CONVERSANT Interactive Voice Response System enables them to enter and retrieve information about what kind of immunization was given, when, and where. Many nonprofit health-care providers use the system, which protects client privacy by requiring passwords of anyone seeking to obtain or contribute information.

Besides saving on administrative costs by centralizing immunization records, the system can track vaccine distribution, usage and inventory to assist public health planning.

The pilot ImmuneWatch project was launched at Howard University Hospital in Washington, D.C. with a $90,000 grant from the AT&T Foundation. But the goal is to go far beyond that hospital and even the Washington area.

Although ImmuneWatch uses custom-designed software, the automated phone interactive system is adaptable to many other community purposes. "There are a lot of non-profits that have it," according to AT&T's Candace Humphrey. "The price is determined by the size of the system and its applications or functions." The most basic system costs between $15,000 and $30,000, and can handle up to 24 calls simultaneously. According to Humphrey, the CONVERSANT system has been used for everything from allowing students to check the status of their registration with the American Association of Medical Colleges to providing easy access to gardening and agricultural tips at the University of Maryland's Cooperative Extension office.

EXHIBIT F